

| Ref # | Hits | Search Query  | DBs   | Default Operator | Plurals | Time Stamp          |
|-------|------|---|---|------------------|---------|---------------------|
| L3    | 3    | ((diffract\$ or bragg or hologra\$ or volume) and (grating or element) and (refract\$ and ind\$4) and (key or cod\$4 or encod\$4) and (freospace or free?space or (free near4 space))),clm. | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR               | ON      | 2005/08/30<br>11:14 |
| S1    | 2    | WO-9636436-\$.did.  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR               | ON      | 2004/09/29<br>09:58 |
| S2    | 120  | (LED or (light near3 emi\$5 near3 diode)) same bragg same (refract\$ near3 ind\$4)  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR               | ON      | 2004/09/29<br>09:59 |

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| S3 | 175 | (US-6785433-\$ or US-5089387-\$ or US-6751387-\$ or US-6694067-\$ or US-6542673-\$ or US-6506342-\$ or US-6096496-\$ or US-6483096-\$ or US-6436651-\$ or US-6434298-\$ or US-6399295-\$ or US-6395558-\$ or US-6350413-\$ or US-6317528-\$ or US-6312961-\$ or US-6289144-\$ or US-6078705-\$ or US-6035082-\$ or US-6005691-\$ or US-5994150-\$ or US-5961924-\$ or US-5832165-\$ or US-5822472-\$ or US-5814565-\$ or US-5745615-\$ or US-5646400-\$).did. or (US-5455178-\$ or US-5446534-\$ or US-5210404-\$ or US-5172250-\$ or US-5113286-\$ or US-5082629-\$ or US-4892385-\$ or US-4815843-\$ or US-4767719-\$ or US-4576439-\$ or US-6591054-\$ or US-5903340-\$ or US-5770455-\$ or US-5565324-\$ or US-6365907-\$ or US-5841555-\$ or US-5627663-\$ or US-5066133-\$ or US-4568141-\$ or US-6586193-\$ or US-6579673-\$ or US-6352828-\$ or US-6280935-\$ or US-6268222-\$ or US-6251691-\$ or US-6235475-\$ or US-6214560-\$).did. or (US-6172218-\$ or US-6172214-\$ or US-6150516-\$ or US-5846719-\$ or US-5352582-\$ or US-5780231-\$ or US-6469785-\$ or US-6087655-\$ or US-5793485-\$ or US-5784157-\$ or US-5608519-\$ or US-5071248-\$ or US-4876208-\$ or US-6093536-\$ or US-5100238-\$ or US-4647544-\$ or US-6437345-\$ or US-5922550-\$ or US-RE33581-\$ or US-5118608-\$ or US-5081012-\$ or US-5003600-\$ or US-4931384-\$ or US-4880752-\$ or US-4023010-\$ or US-4011435-\$ or US-5742432-\$).did. or (US-5729365-\$ or US-5506674-\$ or US-5442433-\$ or US-5394234-\$ or US-5374816-\$ or US-5300764-\$ or US-5291027-\$ or US-6314220-\$ or US-6292282-\$ or US-6221579-\$ or US-6087186-\$ or US-6060256-\$ or US-6036807-\$ or US-5925878-\$ or US-5671308-\$ or US-6346376-\$ or US-5989923-\$ or US-5478527-\$ or US-5156810-\$).did. or (US-20040179267-\$ or US-20040179266-\$ or US-20040132172-\$ or US-20040130786-\$ or US-20040130761-\$ or US-20040125424-\$ or US-20040075907-\$ or US-20040022475-\$ or US-20030231818-\$ or US-20030215185-\$ or US-20030138207-\$ or US-20030133640-\$ or US-20020141702-\$ or US-20020076154-\$ or US-20020041724-\$ or US-20020041723-\$ or US-20040130760-\$ or US-20040021945-\$ or US-20030219205-\$ or US-20020196994-\$ or US-20020191913-\$ or US-20040181344-\$ or US-20020127565-\$ or US-20040126875-\$ or US-20040038307-\$ or US-20030207258-\$).did. or (US-20030207257-\$ or US-20030207255-\$ or US-20030207254-\$ or US-20030207253-\$ or US-20030113766-\$ or US-20030104390-\$ or US-20030059855-\$ or US-20030032039-\$ or US-20030027328-\$ or US-20030027327-\$ or US-20030017581-\$ or US-20020028451-\$ or US-20010004526-\$ or US-20030049620-\$ or US-20020155507-\$ or US-20040151626-\$ or US-20040132214-\$ or US-20040132205-\$ or US-20030092075-\$ or US-20030026891-\$ or US-20030017580-\$ or US-20020192680-\$ or US-20020168295-\$ or US-20020025534-\$ or US-20040145752-\$ or US-20030068657-\$ or US-20030124599-\$).did. or (US-20040175843-\$ or US-20040175842-\$ or US-20030129654-\$ or US-20030077660-\$ or US-20030162296-\$ or US-20030142713-\$ or US-20030142704-\$ or US-20040053295-\$ or US-20040046128-\$ or US-20030207328-\$ or US-20030157731-\$ or US-20030148542-\$ or US-20030132406-\$ or US-20030082587-\$ or US-20020104762-\$ or US-20020090613-\$ or US-20040063146-\$ or US-20030207256-\$ or US-20020034457-\$ or US-20020022273-\$ or US-20010031503-\$).did. or (WO-9636436-\$).did. or (US-20020127565-\$).did. | US-PGPUB;<br>USPAT;<br>EPO;<br>DERWENT                      | OR | OFF | 2004/09/29<br>12:14 |
| S4 | 18  | S3 and (magnet\$ same (orient\$ or align\$))   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON  | 2004/09/29<br>12:15 |
| S5 | 60  | S3 and (low\$5 with refract\$ with ind\$4)   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON  | 2004/09/29<br>12:54 |

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| S6  | 29   | S3 and (low\$5 with refract\$ with ind\$4 with grating) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB           | OR | ON  | 2004/09/29<br>12:56 |
| S7  | 232  | (359/2).CCLS.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/26<br>19:06 |
| S8  | 903  | (359/566).CCLS.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/26<br>19:06 |
| S9  | 676  | (359/569).CCLS.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/26<br>19:06 |
| S10 | 325  | (359/558).CCLS.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/26<br>19:06 |
| S11 | 278  | (359/571).CCLS.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/26<br>19:06 |
| S12 | 330  | (359/572).CCLS.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/26<br>19:06 |
| S13 | 658  | (356/72).CCLS.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/26<br>19:06 |
| S14 | 1888 | (356/73.1).CCLS.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/26<br>19:07 |

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| S15 | 1385 | (385/12).CCLS.     | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/26<br>19:07 |
| S16 | 820  | (385/128).CCLS.    | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/26<br>19:07 |
| S17 | 2621 | (385/37).CCLS.     | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/26<br>19:07 |
| S18 | 72   | (250/559.04).CCLS. | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/26<br>19:07 |
| S19 | 55   | (250/559.11).CCLS. | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/26<br>19:07 |
| S20 | 680  | (250/559.4).CCLS.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/26<br>19:07 |
| S21 | 629  | (250/227.14).CCLS. | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/26<br>19:07 |
| S22 | 152  | (250/227.29).CCLS. | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/26<br>19:08 |
| S23 | 669  | (250/566).CCLS.    | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/26<br>19:08 |

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| S24 | 329   | (250/568).CCLS.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/26<br>19:08 |
| S25 | 203   | (235/473).CCLS.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/26<br>19:08 |
| S26 | 5177  | (435/4).CCLS.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/26<br>19:08 |
| S27 | 922   | (435/288.7).CCLS.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/26<br>19:08 |
| S28 | 710   | (((359/2).CCLS.) or ((359/566).CCLS.) or ((359/569).CCLS.) or<br>((359/558).CCLS.) or ((359/571).CCLS.) or ((359/572).CCLS.) or<br>((356/72).CCLS.) or ((356/73.1).CCLS.) or ((385/12).CCLS.) or ((385/128).<br>CCLS.) or ((385/37).CCLS.) or ((250/559.04).CCLS.) or ((250/559.11).<br>CCLS.) or ((250/559.4).CCLS.) or ((250/227.14).CCLS.) or ((250/227.29).<br>CCLS.) or ((250/566).CCLS.) or ((250/568).CCLS.) or ((235/473).CCLS.) or<br>((435/4).CCLS.) or ((435/288.7).CCLS.)) and ((diffract\$ or bragg or<br>hologra\$) near3 grating) and (substrate or (optic\$4 near3 fiber)) and<br>(chemical or species or assay)                               | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB           | OR | ON  | 2005/01/07<br>16:35 |
| S29 | 575   | (((359/2).CCLS.) or ((359/566).CCLS.) or ((359/569).CCLS.) or<br>((359/558).CCLS.) or ((359/571).CCLS.) or ((359/572).CCLS.) or<br>((356/72).CCLS.) or ((356/73.1).CCLS.) or ((385/12).CCLS.) or ((385/128).<br>CCLS.) or ((385/37).CCLS.) or ((250/559.04).CCLS.) or ((250/559.11).<br>CCLS.) or ((250/559.4).CCLS.) or ((250/227.14).CCLS.) or ((250/227.29).<br>CCLS.) or ((250/566).CCLS.) or ((250/568).CCLS.) or ((235/473).CCLS.) or<br>((435/4).CCLS.) or ((435/288.7).CCLS.)) and ((diffract\$ or bragg or<br>hologra\$) near3 grating) and (substrate or (optic\$4 near3 fiber)) and<br>(chemical or species or assay)) and (refract\$ near3 ind\$4) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB           | OR | ON  | 2004/09/27<br>11:35 |
| S30 | 2     | ("5,089,387").PN.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/26<br>19:53 |
| S31 | 17759 | ((359/2).CCLS.) or ((359/566).CCLS.) or ((359/569).CCLS.) or ((359/558).<br>CCLS.) or ((359/571).CCLS.) or ((359/572).CCLS.) or ((356/72).CCLS.) or<br>((356/73.1).CCLS.) or ((385/12).CCLS.) or ((385/128).CCLS.) or ((385/37).<br>CCLS.) or ((250/559.04).CCLS.) or ((250/559.11).CCLS.) or ((250/559.4).<br>CCLS.) or ((250/227.14).CCLS.) or ((250/227.29).CCLS.) or ((250/566).<br>CCLS.) or ((250/568).CCLS.) or ((235/473).CCLS.) or ((435/4).CCLS.) or<br>((435/288.7).CCLS.)  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB           | OR | ON  | 2004/09/27<br>10:48 |

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| S32 | 298   | (((359/2).CCLS.) or ((359/566).CCLS.) or ((359/569).CCLS.) or ((359/558).CCLS.) or ((359/571).CCLS.) or ((359/572).CCLS.) or ((356/72).CCLS.) or ((356/73.1).CCLS.) or ((385/12).CCLS.) or ((385/128).CCLS.) or ((385/37).CCLS.) or ((250/559.04).CCLS.) or ((250/559.11).CCLS.) or ((250/559.4).CCLS.) or ((250/227.14).CCLS.) or ((250/227.29).CCLS.) or ((250/566).CCLS.) or ((250/568).CCLS.) or ((235/473).CCLS.) or ((435/4).CCLS.) or ((435/288.7).CCLS.)) and (((diffract\$ or bragg or hologra\$ near3 grating) same (substrate or (optic\$ near3 (fiber or waveguide)))) and (id or identif\$ or code or information or authent\$) and ((bind\$3 or attach\$4 or connect\$3 or bound\$3) with (chemical or element or species or assay or ion or molecule or atom\$2))) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB           | OR | ON  | 2004/09/27<br>11:37 |
| S33 | 29    | ("4539507"   "4833092"   "5034613"   "5136572"   "5141671"   "5214409"   "5252962"   "5257011"   "5266926"   "5351052"   "5405709"   "5409783"   "5434878"   "5438878"   "5448582"   "5503805"   "5558904"   "5565324"   "5604097"   "5641634"   "5751629"   "5770358"   "5770455"   "5840485"   "5874214"   "5903340"   "5981180"   "6043023"   "6096494").PN.   | USPAT   | OR | ON  | 2004/09/27<br>11:23 |
| S34 | 26495 | (435/6).CCLS.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/27<br>11:34 |
| S35 | 168   | (((359/2).CCLS.) or ((359/566).CCLS.) or ((359/569).CCLS.) or ((359/558).CCLS.) or ((359/571).CCLS.) or ((359/572).CCLS.) or ((356/72).CCLS.) or ((356/73.1).CCLS.) or ((385/12).CCLS.) or ((385/128).CCLS.) or ((385/37).CCLS.) or ((250/559.04).CCLS.) or ((250/559.11).CCLS.) or ((250/559.4).CCLS.) or ((250/227.14).CCLS.) or ((250/227.29).CCLS.) or ((250/566).CCLS.) or ((250/568).CCLS.) or ((235/473).CCLS.) or ((435/4).CCLS.) or ((435/288.7).CCLS.)) and (((bragg near3 (grating or reflect\$)) same (substrate or (optic\$ near3 (fiber or waveguide)))) and (id or identif\$ or code or information or authent\$) and ((bind\$3 or attach\$4 or connect\$3 or bound\$3) with (chemical or element or species or assay or ion or molecule or atom\$2)))             | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB           | OR | ON  | 2004/09/27<br>11:58 |
| S36 | 76    | (((359/2).CCLS.) or ((359/566).CCLS.) or ((359/569).CCLS.) or ((359/558).CCLS.) or ((359/571).CCLS.) or ((359/572).CCLS.) or ((356/72).CCLS.) or ((356/73.1).CCLS.) or ((385/12).CCLS.) or ((385/128).CCLS.) or ((385/37).CCLS.) or ((250/559.04).CCLS.) or ((250/559.11).CCLS.) or ((250/559.4).CCLS.) or ((250/227.14).CCLS.) or ((250/227.29).CCLS.) or ((250/566).CCLS.) or ((250/568).CCLS.) or ((235/473).CCLS.) or ((435/4).CCLS.) or ((435/288.7).CCLS.)) and (((bragg near3 (reflect\$)) same (substrate or (optic\$ near3 (fiber or waveguide)))) and (id or identif\$ or code or information or authent\$) and ((bind\$3 or attach\$4 or connect\$3 or bound\$3) with (chemical or element or species or assay or ion or molecule or atom\$2)))                        | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB           | OR | ON  | 2004/09/27<br>12:03 |
| S37 | 154   | ((435/6).CCLS.) and (((diffract\$ or bragg or hologra\$ near3 grating) and (substrate or (optic\$4 near3 fiber))) and (chemical or species or assay)  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB           | OR | ON  | 2004/09/27<br>12:12 |
| S38 | 0     | WO-02061429-\$.did.   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB           | OR | ON  | 2004/09/27<br>12:12 |
| S39 | 0     | WO-0261429-\$.did.  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB           | OR | ON  | 2004/09/27<br>12:12 |

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| S40 | 0   | WO-2002061429-\$.did.   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB           | OR | ON  | 2004/09/27<br>12:12 |
| S41 | 1   | WO-200261429-\$.did.  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB           | OR | ON  | 2004/09/27<br>12:17 |
| S42 | 2   | ("20020127565").PN.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/27<br>12:18 |
| S43 | 19  | ("4539507"   "4833092"   "5034613"   "5136572"   "5141671"  <br>"5214409"   "5252962"   "5257011"   "5266926"   "5351052"  <br>"5405709"   "5409783"   "5438878"   "5448582"   "5558904"  <br>"5565324"   "5641634"   "5751629"   "5770455").PN.  | USPAT   | OR | ON  | 2004/09/27<br>13:28 |
| S44 | 85  | ((435/6).CCLS.) and ((diffract\$ or bragg or hologra\$) near3 grating) and<br>(substrate or (optic\$4 near3 fiber)) and (chemical or species or assay))<br>and (refract\$ near3 ind\$4)   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB           | OR | ON  | 2004/09/27<br>14:28 |
| S45 | 9   | ((435/6).CCLS.) and (((bragg) near3 (grating or reflect\$)) same (substrate<br>or (optic\$ near3 (fiber or waveguide)))) and (id or identif\$ or code or<br>information or authent\$) and ((bind\$3 or attach\$4 or connect\$3 or<br>bound\$3) with (chemical or element or species or assay or ion or molecule<br>or atom\$2))             | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB           | OR | ON  | 2004/09/27<br>13:34 |
| S46 | 6   | ((435/6).CCLS.) and (((bragg) near3 (reflect\$)) same (substrate or (optic\$<br>near3 (fiber or waveguide)))) and (id or identif\$ or code or information or<br>authent\$) and ((bind\$3 or attach\$4 or connect\$3 or bound\$3) with<br>(chemical or element or species or assay or ion or molecule or atom\$2))                           | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB           | OR | ON  | 2004/09/27<br>14:02 |
| S47 | 77  | ((435/6).CCLS.) and (((diffract\$ or bragg or hologra\$) near3 grating)<br>same (substrate or (optic\$ near3 (fiber or waveguide)))) and (id or<br>identif\$ or code or information or authent\$) and ((bind\$3 or attach\$4 or<br>connect\$3 or bound\$3) with (chemical or element or species or assay or<br>ion or molecule or atom\$2)) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB           | OR | ON  | 2004/09/27<br>14:02 |
| S48 | 333 | (particle or bead or microparticle or microbead or micro?particle or<br>micro?bead or (micro near3 particle) or (micro near3 bead)) and (tag\$4 or<br>label\$4 or cod\$3 or encod\$3) and (bragg near3 (grating or mirror or<br>reflect\$))   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB           | OR | ON  | 2004/09/27<br>17:04 |
| S49 | 234 | ((particle or bead or microparticle or microbead or micro?particle or<br>micro?bead or (micro near3 particle) or (micro near3 bead)) and (tag\$4 or<br>label\$4 or cod\$3 or encod\$3) and (bragg near3 (grating or mirror or<br>reflect\$))) and (refract\$ near3 ind\$4)  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB           | OR | ON  | 2004/09/27<br>14:29 |
| S50 | 241 | (particle or bead or microparticle or microbead or micro?particle or<br>micro?bead or (micro near3 particle) or (micro near3 bead)) and (tag\$4 or<br>label\$4 or cod\$3 or encod\$3) and (grating with (refract\$ near3 ind\$4))   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB           | OR | ON  | 2004/09/27<br>17:31 |

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|-----|-----|---|---|----|----|---------------------|
| S51 | 66  | (particle or bead or microparticle or microbead or micro?particle or micro?bead or (micro near3 particle) or (micro near3 bead)) and (tag\$4 or label\$4 or cod\$3 or encod\$3) and (grating with (refract\$ near3 ind\$4) with (vary\$3 or varia\$)) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2004/09/27<br>17:07 |
| S52 | 150 | (particle or bead or microparticle or microbead or micro?particle or micro?bead or (micro near3 particle) or (micro near3 bead)) and (tag\$4 or label\$4 or cod\$3 or encod\$3) and (grating near3 refract\$ near3 ind\$4)                            | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2004/09/27<br>17:49 |
| S53 | 2   | ((fiber or bragg or phase ) near3 grating) with (embed\$ or encod\$3 or cod\$3 or tag\$4 or label\$4) with (particle or bead or microparticle or microbead or micro?particle or micro?bead or (micro near3 particle) or (micro near3 bead))           | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2004/09/27<br>17:52 |
| S54 | 32  | grating with (embed\$ or encod\$3 or cod\$3 or tag\$4 or label\$4) with (particle or bead or microparticle or microbead or micro?particle or micro?bead or (micro near3 particle) or (micro near3 bead))  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2004/09/27<br>18:13 |
| S55 | 539 | grating with (embed\$ or encod\$3 or cod\$3 or tag\$4 or label\$4) with (substrate or film or layer)  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2004/09/27<br>18:14 |
| S56 | 61  | ((bragg or phase or fiber) near3 grating) with (embed\$ or encod\$3 or cod\$3 or tag\$4 or label\$4) with (substrate or film or layer)  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2004/09/27<br>18:22 |
| S57 | 343 | ((bragg or phase or fiber) near3 grating) with (embed\$ or encod\$3 or cod\$3 or tag\$4 or label\$4)) and combinat\$  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2004/09/27<br>18:23 |
| S58 | 2   | ((bragg or phase or fiber) near3 grating) with (embed\$ or encod\$3 or cod\$3 or tag\$4 or label\$4)) and combinat\$) and (refract\$ near3 ind\$4) and assay  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2004/09/27<br>18:23 |
| S59 | 2   | ((bragg or phase or fiber) near3 grating) with (embed\$ or encod\$3 or cod\$3 or tag\$4 or label\$4)) and combinat\$) and assay   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2004/09/27<br>18:23 |
| S60 | 2   | ((bragg or phase or fiber) near3 grating) with (embed\$ or encod\$3 or cod\$3 or tag\$4 or label\$4)) and assay\$3  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2004/09/27<br>18:24 |
| S61 | 5   | ((bragg or phase or fiber or hologra\$) near3 grating) with (embed\$ or encod\$3 or cod\$3 or tag\$4 or label\$4)) and assay\$3   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2004/09/27<br>18:25 |



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|-----|--------|---|---|----|----|---------------------|
| S62 | 9      | ((bragg or phase or fiber or hologra\$) near3 grating) with (embed\$ or encod\$3 or cod\$3 or tag\$4 or label\$4 or identif\$)) and assay\$3  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2004/09/27<br>18:29 |
| S63 | 93     | ((bragg or phase or fiber or hologra\$) near3 grating) with (particle or bead or microparticle or microbead or micro?particle or micro?bead or (micro near3 particle) or (micro near3 bead))  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2004/09/28<br>09:03 |
| S64 | 37374  | ((bragg or phase or fiber or hologra\$) near3 grating) or ((vary\$ or varia\$) with refract\$ with ind\$4)  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2004/09/28<br>12:27 |
| S65 | 4343   | ((bragg or phase or fiber or hologra\$) near3 grating) or ((vary\$ or varia\$) with refract\$ with ind\$4)) and ((particle or bead or microparticle or microbead or micro?particle or micro?bead or (micro near3 particle) or (micro near3 bead) or fiber or substrate or layer or film) with (embed\$ or encod\$3 or cod\$3 or tag\$4 or label\$4 or identif\$))   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2004/09/28<br>11:10 |
| S66 | 344    | ((bragg or phase or fiber or hologra\$) near3 grating) or ((vary\$ or varia\$) with refract\$ with ind\$4)) and ((particle or bead or microparticle or microbead or micro?particle or micro?bead or (micro near3 particle) or (micro near3 bead) or fiber or substrate or layer or film) with (embed\$ or encod\$3 or cod\$3 or tag\$4 or label\$4 or identif\$))) and (assay\$3 or combinator\$)             | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2004/09/28 11:11    |
| S67 | 22407  | ((bragg or phase or fiber or hologra\$ or volume) near3 grating) or (period\$ with refract\$ with ind\$4 with grating)  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2004/09/28<br>11:10 |
| S68 | 2786   | ((bragg or phase or fiber or hologra\$ or volume) near3 grating) or (period\$ with refract\$ with ind\$4 with grating)) and ((particle or bead or microparticle or microbead or micro?particle or micro?bead or (micro near3 particle) or (micro near3 bead) or fiber or substrate or layer or film) with (embed\$ or encod\$3 or cod\$3 or tag\$4 or label\$4 or identif\$))                                 | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2004/09/28 11:11    |
| S69 | 249    | ((bragg or phase or fiber or hologra\$ or volume) near3 grating) or (period\$ with refract\$ with ind\$4 with grating)) and ((particle or bead or microparticle or microbead or micro?particle or micro?bead or (micro near3 particle) or (micro near3 bead) or fiber or substrate or layer or film) with (embed\$ or encod\$3 or cod\$3 or tag\$4 or label\$4 or identif\$))) and (assay\$3 or combinator\$) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2004/09/28<br>11:12 |
| S70 | 167547 | (index\$ or address\$) with (particle or bead or microparticle or microbead or micro?particle or micro?bead or (micro near3 particle) or (micro near3 bead) or fiber or substrate or layer or film)   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2004/09/28<br>11:22 |
| S71 | 6664   | ((index\$ or address\$) with (particle or bead or microparticle or microbead or micro?particle or micro?bead or (micro near3 particle) or (micro near3 bead) or fiber or substrate or layer or film)) same grating  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2004/09/28<br>11:22 |
| S72 | 140    | ((index\$ or address\$) with (particle or bead or microparticle or microbead or micro?particle or micro?bead or (micro near3 particle) or (micro near3 bead) or fiber or substrate or layer or film)) same grating and (refract\$ near3 ind\$4) and (assay or combinator\$)   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2004/09/28<br>11:40 |

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|-----|----|--|---|----|-----|---------------------|
| S73 | 1  | ("re37473").PN.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/28<br>11:41 |
| S74 | 1  | ("re37891").PN.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/28<br>11:41 |
| S75 | 1  | ("re33581").PN.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/28<br>11:42 |
| S76 | 76 | ((("3968476") or ("4011435") or ("4023010") or ("4053228") or ("4131337") or ("4386274") or ("4445229") or ("4560881") or ("4562157") or ("4647544") or ("4678752") or ("4685480") or ("4740688") or ("4748110") or ("4767719") or ("4816659") or ("4841140") or ("4877747") or ("4880752") or ("4882288") or ("4921805") or ("4931384") or ("4958376") or ("4992385") or ("5003600") or ("5033826") or ("5067155") or ("5081012") or ("5089387") or ("5095194") or ("5100238") or ("5115121") or ("5118608") or ("5138468") or ("5141848") or ("5144461") or ("5166813"))).PN.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/28<br>11:59 |
| S77 | 97 | ((("5196350") or ("5200794") or ("5291006") or ("5291027") or ("5300764") or ("5310686") or ("5349442") or ("5352582") or ("5364797") or ("5374816") or ("5374818") or ("5394234") or ("5442433") or ("5448659") or ("5461528") or ("5461475") or ("5465176") or ("5468649") or ("5506674") or ("5514785") or ("5528045") or ("5547849") or ("5585639") or ("5607188") or ("5621515") or ("5627040") or ("5627663") or ("5633724") or ("5663790") or ("5667976") or ("5721912") or ("5721435") or ("5729365") or ("5736330") or ("5742432") or ("5759778") or ("5760961") or ("5766956") or ("5793502") or ("5798273") or ("5799231") or ("5801857") or ("5804384") or ("5822472") or ("5824478") or ("5824557") or ("5831698") or ("5837475") or ("5841555"))).PN.                | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/28<br>12:18 |
| S78 | 4  | ((("5451528") or ("5712912"))).PN.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/28<br>12:19 |
| S79 | 96 | ((("5846737") or ("5874187") or ("5895750") or ("5922550") or ("5925562") or ("5925878") or ("5945679") or ("5986838") or ("5989923") or ("5998796") or ("6001510") or ("6017754") or ("6025129") or ("6025283") or ("6036807") or ("6043880") or ("6046925") or ("6049727") or ("6057107") or ("6060256") or ("6067167") or ("6067392") or ("6078048") or ("6087186") or ("6096496") or ("6097485") or ("6103535") or ("6118127") or ("6160240") or ("6160656") or ("6164548") or ("6165592") or ("6165648") or ("6194563") or ("6218194") or ("6221579") or ("6229635") or ("6259450") or ("6268128") or ("6284459") or ("6292282") or ("6292319") or ("6301047") or ("6304263") or ("6306587") or ("6309601") or ("6312961") or ("6313771") or ("6314220") or ("6319668"))).PN. | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/28<br>12:22 |

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|-----|------|---|---|----|-----|---------------------|
| S80 | 72   | ((("6322932") or ("6329963") or ("6331273") or ("6352854") or ("6355198") or ("6371370") or ("6372428") or ("6399295") or ("6406841") or ("6406848") or ("6416714") or ("6417010") or ("6428707") or ("6428957") or ("6433849") or ("6436651") or ("6489606") or ("6496287") or ("6506342") or ("6515753") or ("6522406") or ("6524793") or ("6533183") or ("6560017") or ("6565770") or ("6592036") or ("6594421") or ("6609728") or ("6613581") or ("6618342") or ("6622916") or ("6628439") or ("6632655") or ("6635470") or ("6678429") or ("6689316") or ("6692912"))).PN. | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/28<br>12:48 |
| S81 | 12   | ((("20020090650") or ("20030129654") or ("20020022273") or ("20030138208") or ("20030032203") or ("20030021003"))).PN.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/28<br>12:52 |
| S82 | 4    | ((("5671308") or ("6340588"))).PN.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/28<br>12:52 |
| S83 | 4262 | (436/518).CCLS.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/28<br>12:59 |
| S84 | 742  | (436/524).CCLS.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/28<br>12:58 |
| S85 | 524  | (436/525).CCLS.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/28<br>12:58 |
| S86 | 627  | (436/526).CCLS.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/28<br>12:58 |
| S87 | 786  | (436/527).CCLS.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/28<br>12:58 |
| S88 | 940  | (436/528).CCLS.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/28<br>12:59 |

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|------|------|--|---|----|-----|---------------------|
| S89  | 1346 | (436/531).CCLS.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2004/09/28<br>12:59 |
| S90  | 6123 | ((436/518).CCLS.) or ((436/524).CCLS.) or ((436/525).CCLS.) or ((436/526).CCLS.) or ((436/527).CCLS.) or ((436/528).CCLS.) or ((436/531).CCLS.)  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB           | OR | ON  | 2004/09/28<br>12:59 |
| S91  | 144  | ((((436/518).CCLS.) or ((436/524).CCLS.) or ((436/525).CCLS.) or ((436/526).CCLS.) or ((436/527).CCLS.) or ((436/528).CCLS.) or ((436/531).CCLS.)) and grating) and (refract\$ near3 ind\$4)   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB           | OR | ON  | 2004/09/28<br>13:00 |
| S92  | 226  | ((((436/518).CCLS.) or ((436/524).CCLS.) or ((436/525).CCLS.) or ((436/526).CCLS.) or ((436/527).CCLS.) or ((436/528).CCLS.) or ((436/531).CCLS.)) and grating   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB           | OR | ON  | 2004/09/28<br>13:49 |
| S93  | 442  | (modulat\$ with refract\$ with ind\$4 with grating) and (embed\$ or encod\$3 or cod\$3 or tag\$4 or label\$4 or identif\$)   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB           | OR | ON  | 2004/09/28<br>13:51 |
| S94  | 34   | (modulat\$ with refract\$ with ind\$4 with grating) and (assay\$3 or combinator\$)   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB           | OR | ON  | 2004/09/29<br>09:49 |
| S101 | 615  | ((((359/2).CCLS.) or ((359/566).CCLS.) or ((359/569).CCLS.) or ((359/558).CCLS.) or ((359/571).CCLS.) or ((359/572).CCLS.) or ((356/72).CCLS.) or ((356/73.1).CCLS.) or ((385/12).CCLS.) or ((385/128).CCLS.) or ((385/37).CCLS.) or ((250/559.04).CCLS.) or ((250/559.11).CCLS.) or ((250/559.4).CCLS.) or ((250/227.14).CCLS.) or ((250/227.29).CCLS.) or ((250/566).CCLS.) or ((250/568).CCLS.) or ((235/473).CCLS.) or ((435/4).CCLS.) or ((435/288.7).CCLS.)) and ((diffract\$ or bragg or hologra\$) near3 grating) and (substrate or (optic\$4 near3 fiber)) and (chemical or species or assay)) and (refract\$ near3 ind\$4)   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB           | OR | ON  | 2005/01/07<br>16:35 |
| S102 | 313  | ((((359/2).CCLS.) or ((359/566).CCLS.) or ((359/569).CCLS.) or ((359/558).CCLS.) or ((359/571).CCLS.) or ((359/572).CCLS.) or ((356/72).CCLS.) or ((356/73.1).CCLS.) or ((385/12).CCLS.) or ((385/128).CCLS.) or ((385/37).CCLS.) or ((250/559.04).CCLS.) or ((250/559.11).CCLS.) or ((250/559.4).CCLS.) or ((250/227.14).CCLS.) or ((250/227.29).CCLS.) or ((250/566).CCLS.) or ((250/568).CCLS.) or ((235/473).CCLS.) or ((435/4).CCLS.) or ((435/288.7).CCLS.)) and (((diffract\$ or bragg or hologra\$) near3 grating) same (substrate or (optic\$ near3 (fiber or waveguide)))) and (id or identif\$ or code or information or authent\$) and ((bind\$3 or attach\$4 or connect\$3 or bound\$3) with (chemical or element or species or assay or ion or molecule or atom\$2)) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB           | OR | ON  | 2005/01/07<br>16:35 |

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|------|-----|---|---|----|----|---------------------|
| S103 | 179 | (((359/2).CCLS.) or ((359/566).CCLS.) or ((359/569).CCLS.) or ((359/558).CCLS.) or ((359/571).CCLS.) or ((359/572).CCLS.) or ((356/72).CCLS.) or ((356/73.1).CCLS.) or ((385/12).CCLS.) or ((385/128).CCLS.) or ((385/37).CCLS.) or ((250/559.04).CCLS.) or ((250/559.11).CCLS.) or ((250/559.4).CCLS.) or ((250/227.14).CCLS.) or ((250/227.29).CCLS.) or ((250/566).CCLS.) or ((250/568).CCLS.) or ((235/473).CCLS.) or ((435/4).CCLS.) or ((435/288.7).CCLS.)) and (((bragg) near3 (grating or reflect\$)) same (substrate or (optic\$ near3 (fiber or waveguide)))) and (id or identif\$ or code or information or authent\$) and ((bind\$3 or attach\$4 or connect\$3 or bound\$3) with (chemical or element or species or assay or ion or molecule or atom\$2)) | US-PGPUB;<br>USPAT;<br>EPO: JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/01/07<br>16:35 |
| S104 | 80  | (((359/2).CCLS.) or ((359/566).CCLS.) or ((359/569).CCLS.) or ((359/558).CCLS.) or ((359/571).CCLS.) or ((359/572).CCLS.) or ((356/72).CCLS.) or ((356/73.1).CCLS.) or ((385/12).CCLS.) or ((385/128).CCLS.) or ((385/37).CCLS.) or ((250/559.04).CCLS.) or ((250/559.11).CCLS.) or ((250/559.4).CCLS.) or ((250/227.14).CCLS.) or ((250/227.29).CCLS.) or ((250/566).CCLS.) or ((250/568).CCLS.) or ((235/473).CCLS.) or ((435/4).CCLS.) or ((435/288.7).CCLS.)) and (((bragg) near3 (reflect\$)) same (substrate or (optic\$ near3 (fiber or waveguide)))) and (id or identif\$ or code or information or authent\$) and ((bind\$3 or attach\$4 or connect\$3 or bound\$3) with (chemical or element or species or assay or ion or molecule or atom\$2))            | US-PGPUB;<br>USPAT;<br>EPO: JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/01/07<br>16:35 |
| S105 | 164 | ((435/6).CCLS.) and (((diffract\$ or bragg or hologra\$) near3 grating) and (substrate or (optic\$4 near3 fiber))) and (chemical or species or assay)   | US-PGPUB;<br>USPAT;<br>EPO: JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/01/07<br>16:35 |
| S106 | 90  | (((435/6).CCLS.) and (((diffract\$ or bragg or hologra\$) near3 grating) and (substrate or (optic\$4 near3 fiber))) and (chemical or species or assay)) and (refract\$ near3 ind\$4)  | US-PGPUB;<br>USPAT;<br>EPO: JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/01/07<br>16:36 |
| S107 | 9   | ((435/6).CCLS.) and (((bragg) near3 (grating or reflect\$)) same (substrate or (optic\$ near3 (fiber or waveguide)))) and (id or identif\$ or code or information or authent\$) and ((bind\$3 or attach\$4 or connect\$3 or bound\$3) with (chemical or element or species or assay or ion or molecule or atom\$2))   | US-PGPUB;<br>USPAT;<br>EPO: JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/01/07<br>16:36 |
| S108 | 6   | ((435/6).CCLS.) and (((bragg) near3 (reflect\$)) same (substrate or (optic\$ near3 (fiber or waveguide)))) and (id or identif\$ or code or information or authent\$) and ((bind\$3 or attach\$4 or connect\$3 or bound\$3) with (chemical or element or species or assay or ion or molecule or atom\$2))  | US-PGPUB;<br>USPAT;<br>EPO: JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/01/07<br>16:36 |
| S109 | 82  | ((435/6).CCLS.) and (((diffract\$ or bragg or hologra\$) near3 grating) same (substrate or (optic\$ near3 (fiber or waveguide)))) and (id or identif\$ or code or information or authent\$) and ((bind\$3 or attach\$4 or connect\$3 or bound\$3) with (chemical or element or species or assay or ion or molecule or atom\$2))   | US-PGPUB;<br>USPAT;<br>EPO: JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/01/07<br>16:36 |
| S110 | 144 | (((436/518).CCLS.) or ((436/524).CCLS.) or ((436/525).CCLS.) or ((436/526).CCLS.) or ((436/527).CCLS.) or ((436/528).CCLS.) or ((436/531).CCLS.)) and grating) and (refract\$ near3 ind\$4)   | US-PGPUB;<br>USPAT;<br>EPO: JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/01/07<br>16:36 |
| S111 | 233 | (((436/518).CCLS.) or ((436/524).CCLS.) or ((436/525).CCLS.) or ((436/526).CCLS.) or ((436/527).CCLS.) or ((436/528).CCLS.) or ((436/531).CCLS.)) and grating   | US-PGPUB;<br>USPAT;<br>EPO: JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/01/07<br>16:37 |

|      |     |   |   |    |    |                     |
|------|-----|---|---|----|----|---------------------|
| S112 | 2   | wo-9715690-\$.did.  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/01/07<br>16:38 |
| S113 | 258 | ((particle or bead or microparticle or microbead or micro?particle or micro?bead or (micro near3 particle) or (micro near3 bead)) and (tag\$4 or label\$4 or cod\$3 or encod\$3) and (bragg near3 (grating or mirror or reflect\$))) and (refract\$ near3 ind\$4) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/01/09<br>14:14 |
| S114 | 261 | (particle or bead or microparticle or microbead or micro?particle or micro?bead or (micro near3 particle) or (micro near3 bead)) and (tag\$4 or label\$4 or cod\$3 or encod\$3) and (grating with (refract\$ near3 ind\$4))                                       | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/01/09<br>14:15 |
| S115 | 73  | (particle or bead or microparticle or microbead or micro?particle or micro?bead or (micro near3 particle) or (micro near3 bead)) and (tag\$4 or label\$4 or cod\$3 or encod\$3) and (grating with (refract\$ near3 ind\$4) with (vary\$3 or varia\$))             | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/01/09<br>14:15 |
| S116 | 164 | (particle or bead or microparticle or microbead or micro?particle or micro?bead or (micro near3 particle) or (micro near3 bead)) and (tag\$4 or label\$4 or cod\$3 or encod\$3) and (grating near3 refract\$ near3 ind\$4)  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/01/09<br>14:15 |
| S117 | 2   | ((fiber or bragg or phase ) near3 grating) with (embed\$ or encod\$3 or cod\$3 or tag\$4 or label\$4) with (particle or bead or microparticle or microbead or micro?particle or micro?bead or (micro near3 particle) or (micro near3 bead))                       | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/01/09<br>14:15 |
| S118 | 37  | grating with (embed\$ or encod\$3 or cod\$3 or tag\$4 or label\$4) with (particle or bead or microparticle or microbead or micro?particle or micro?bead or (micro near3 particle) or (micro near3 bead))  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/01/09<br>14:15 |
| S119 | 61  | ((bragg or phase or fiber) near3 grating) with (embed\$ or encod\$3 or cod\$3 or tag\$4 or label\$4) with (substrate or film or layer)  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/01/09<br>14:15 |
| S120 | 2   | ((((bragg or phase or fiber) near3 grating) with (embed\$ or encod\$3 or cod\$3 or tag\$4 or label\$4)) and combinat\$) and (refract\$ near3 ind\$4) and assay  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/01/09<br>14:15 |
| S121 | 6   | ((((bragg or phase or fiber or hologra\$) near3 grating) with (embed\$ or encod\$3 or cod\$3 or tag\$4 or label\$4)) and assay\$3   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/01/09<br>14:16 |
| S122 | 10  | ((((bragg or phase or fiber or hologra\$) near3 grating) with (embed\$ or encod\$3 or cod\$3 or tag\$4 or label\$4 or identif\$)) and assay\$3  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/01/09<br>14:16 |

|      |     |  |   |    |    |                     |
|------|-----|--|---|----|----|---------------------|
| S123 | 99  | ((bragg or phase or fiber or hologra\$) near3 grating) with (particle or bead or microparticle or microbead or micro?particle or micro?bead or (micro near3 particle) or (micro near3 bead))   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/01/09<br>14:16 |
| S124 | 377 | (((((bragg or phase or fiber or hologra\$) near3 grating) or ((vary\$ or varia\$) with refract\$ with ind\$4)) and ((particle or bead or microparticle or microbead or micro?particle or micro?bead or (micro near3 particle) or (micro near3 bead) or fiber or substrate or layer or film) with (embed\$ or encod\$3 or cod\$3 or tag\$4 or label\$4 or identif\$))) and (assay\$3 or combinator\$)             | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/01/09<br>14:16 |
| S125 | 275 | (((((bragg or phase or fiber or hologra\$ or volume) near3 grating) or (period\$ with refract\$ with ind\$4 with grating)) and ((particle or bead or microparticle or microbead or micro?particle or micro?bead or (micro near3 particle) or (micro near3 bead) or fiber or substrate or layer or film) with (embed\$ or encod\$3 or cod\$3 or tag\$4 or label\$4 or identif\$))) and (assay\$3 or combinator\$) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/01/09<br>14:16 |
| S126 | 156 | ((((index\$ or address\$) with (particle or bead or microparticle or microbead or micro?particle or micro?bead or (micro near3 particle) or (micro near3 bead) or fiber or substrate or layer or film)) same grating) and (refract\$ near3 ind\$4) and (assay or combinator\$)   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/01/09<br>14:17 |
| S127 | 35  | (modulat\$ with refract\$ with ind\$4 with grating) and (assay\$3 or combinator\$)   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/01/09<br>14:17 |

|      |       |  |   |    |    |                     |
|------|-------|--|---|----|----|---------------------|
| S128 | 191   | (US-20010004526-\$ or US-20010031503-\$ or US-20020022273-\$ or US-20020025534-\$ or US-20020028451-\$ or US-20020034457-\$ or US-20020041723-\$ or US-20020041724-\$ or US-20020076154-\$ or US-20020090613-\$ or US-20020104762-\$ or US-20020127565-\$ or US-20020141702-\$ or US-20020155507-\$ or US-20020168295-\$ or US-20020191913-\$ or US-20020192680-\$ or US-20020196994-\$ or US-20030017580-\$ or US-20030017581-\$ or US-20030026891-\$ or US-20030027327-\$ or US-20030027328-\$ or US-20030032039-\$ or US-20030049620-\$ or US-20030059855-\$).did. or (US-20030068657-\$ or US-20030077660-\$ or US-20030082587-\$ or US-20030092075-\$ or US-20030104390-\$ or US-20030113766-\$ or US-20030124599-\$ or US-20030129654-\$ or US-20030132406-\$ or US-20030133640-\$ or US-20030138207-\$ or US-20030142704-\$ or US-20030142713-\$ or US-20030148542-\$ or US-20030157731-\$ or US-20030162296-\$ or US-20030207253-\$ or US-20030207254-\$ or US-20030207255-\$ or US-20030207256-\$ or US-20030207257-\$ or US-20030207258-\$ or US-20030207328-\$ or US-20030215185-\$ or US-20030219205-\$ or US-20030231818-\$ or US-20040021945-\$).did. or (US-20040022475-\$ or US-20040038307-\$ or US-20040046128-\$ or US-20040053295-\$ or US-20040063146-\$ or US-20040075907-\$ or US-20040125424-\$ or US-20040126875-\$ or US-20040130760-\$ or US-20040130761-\$ or US-20040130786-\$ or US-20040132172-\$ or US-20040132205-\$ or US-20040132214-\$ or US-20040145752-\$ or US-20040151626-\$ or US-20040175842-\$ or US-20040175843-\$ or US-20040179266-\$ or US-20040179267-\$ or US-20040181344-\$ or US-20040233485-\$ or US-20040247486-\$ or US-20040197816-\$ or US-20040263923-\$ or US-20040254419-\$ or US-20040241765-\$).did. or (US-4011435-\$ or US-4023010-\$ or US-4568141-\$ or US-4576439-\$ or US-4647544-\$ or US-4767719-\$ or US-4815843-\$ or US-4876208-\$ or US-4880752-\$ or US-4892385-\$ or US-4931384-\$ or US-5003600-\$ or US-5066133-\$ or US-5071248-\$ or US-5081012-\$ or US-5082629-\$ or US-5089387-\$ or US-5100238-\$ or US-5113286-\$ or US-5118608-\$ or US-5156810-\$ or US-5172250-\$ or US-5210404-\$ or US-5291027-\$ or US-5300764-\$ or US-5352582-\$).did. or (US-5374816-\$ or US-5394234-\$ or US-5442433-\$ or US-5446534-\$ or US-5455178-\$ or US-5478527-\$ or US-5506674-\$ or US-5565324-\$ or US-5608519-\$ or US-5627663-\$ or US-5646400-\$ or US-5671308-\$ or US-5729365-\$ or US-5742432-\$ or US-5745615-\$ or US-5770455-\$ or US-5780231-\$ or US-5784157-\$ or US-5793485-\$ or US-5814565-\$ or US-5822472-\$ or US-5832165-\$ or US-5841555-\$ or US-5846719-\$ or US-5903340-\$ or US-5922550-\$ or US-5925878-\$).did. or (US-5961924-\$ or US-5989923-\$ or US-5994150-\$ or US-6005691-\$ or US-6035082-\$ or US-6036807-\$ or US-6060256-\$ or US-6078705-\$ or US-6087186-\$ or US-6087655-\$ or US-6093536-\$ or US-6096496-\$ or US-6150516-\$ or US-6172214-\$ or US-6172218-\$ or US-6214560-\$ or US-6221579-\$ or US-6235475-\$ or US-6251691-\$ or US-6268222-\$ or US-6280935-\$ or US-6289144-\$ or US-6292282-\$ or US-6312961-\$ or US-6314220-\$ or US-6317528-\$ or US-6346376-\$).did. or (US-6350413-\$ or US-6352828-\$ or US-6365907-\$ or US-6395558-\$ or US-6399295-\$ or US-6434298-\$ or US-6436651-\$ or US-6437345-\$ or US-6469785-\$ or US-6483096-\$ or US-6506342-\$ or US-6542673-\$ or US-6579673-\$ or US-6586193-\$ or US-6591054-\$ or US-6694067-\$ or US-6751387-\$ or US-6785433-\$ or US-RE33581-\$ or US-6795599-\$ or US-6067392-\$ or US-6025129-\$ or US-5925562-\$ or US-6372428-\$ or US-6352854-\$ or US-6331273-\$ or US-6340588-\$).did. or (WO-9636436-\$).did. or (US-20020127565-\$ or WO-200237944-\$ or US-20020022273-\$).did. | US-PGPUB;<br>USPAT;<br>EPO;<br>DERWENT                      | OR | ON | 2005/01/09<br>17:41 |
| S129 | 23    | S128 and blaz\$  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/01/09<br>17:41 |
| S130 | 19395 | ((359/2).CCLS.) or ((359/566).CCLS.) or ((359/569).CCLS.) or ((359/558).CCLS.) or ((359/571).CCLS.) or ((359/572).CCLS.) or ((356/72).CCLS.) or ((356/73.1).CCLS.) or ((385/12).CCLS.) or ((385/128).CCLS.) or ((385/37).CCLS.) or ((250/559.04).CCLS.) or ((250/559.11).CCLS.) or ((250/559.4).CCLS.) or ((250/227.14).CCLS.) or ((250/227.29).CCLS.) or ((250/566).CCLS.) or ((250/568).CCLS.) or ((235/473).CCLS.) or ((435/4).CCLS.) or ((435/288.7).CCLS.)  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/08/26<br>16:31 |



|      |     |   |   |    |    |                     |
|------|-----|---|---|----|----|---------------------|
| S131 | 852 | (((359/2).CCLS.) or ((359/566).CCLS.) or ((359/569).CCLS.) or ((359/558).CCLS.) or ((359/571).CCLS.) or ((359/572).CCLS.) or ((356/72).CCLS.) or ((356/73.1).CCLS.) or ((385/12).CCLS.) or ((385/128).CCLS.) or ((385/37).CCLS.) or ((250/559.04).CCLS.) or ((250/559.11).CCLS.) or ((250/559.4).CCLS.) or ((250/227.14).CCLS.) or ((250/227.29).CCLS.) or ((250/566).CCLS.) or ((250/568).CCLS.) or ((235/473).CCLS.) or ((435/4).CCLS.) or ((435/288.7).CCLS.)) and ((diffract\$ or bragg or hologra\$) near3 grating) and (substrate or (optic\$4 near3 fiber)) and (chemical or species or assay)   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/08/26<br>16:31 |
| S132 | 685 | (((359/2).CCLS.) or ((359/566).CCLS.) or ((359/569).CCLS.) or ((359/558).CCLS.) or ((359/571).CCLS.) or ((359/572).CCLS.) or ((356/72).CCLS.) or ((356/73.1).CCLS.) or ((385/12).CCLS.) or ((385/128).CCLS.) or ((385/37).CCLS.) or ((250/559.04).CCLS.) or ((250/559.11).CCLS.) or ((250/559.4).CCLS.) or ((250/227.14).CCLS.) or ((250/227.29).CCLS.) or ((250/566).CCLS.) or ((250/568).CCLS.) or ((235/473).CCLS.) or ((435/4).CCLS.) or ((435/288.7).CCLS.)) and ((diffract\$ or bragg or hologra\$) near3 grating) and (substrate or (optic\$4 near3 fiber)) and (chemical or species or assay)) and (refract\$ near3 ind\$4)   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/08/26<br>16:31 |
| S133 | 353 | (((359/2).CCLS.) or ((359/566).CCLS.) or ((359/569).CCLS.) or ((359/558).CCLS.) or ((359/571).CCLS.) or ((359/572).CCLS.) or ((356/72).CCLS.) or ((356/73.1).CCLS.) or ((385/12).CCLS.) or ((385/128).CCLS.) or ((385/37).CCLS.) or ((250/559.04).CCLS.) or ((250/559.11).CCLS.) or ((250/559.4).CCLS.) or ((250/227.14).CCLS.) or ((250/227.29).CCLS.) or ((250/566).CCLS.) or ((250/568).CCLS.) or ((235/473).CCLS.) or ((435/4).CCLS.) or ((435/288.7).CCLS.)) and (((diffract\$ or bragg or hologra\$) near3 grating) same (substrate or (optic\$ near3 (fiber or waveguide)))) and (id or identif\$ or code or information or authent\$) and ((bind\$3 or attach\$4 or connect\$3 or bound\$3) with (chemical or element or species or assay or ion or molecule or atom\$2)) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/08/26<br>16:31 |
| S134 | 199 | (((359/2).CCLS.) or ((359/566).CCLS.) or ((359/569).CCLS.) or ((359/558).CCLS.) or ((359/571).CCLS.) or ((359/572).CCLS.) or ((356/72).CCLS.) or ((356/73.1).CCLS.) or ((385/12).CCLS.) or ((385/128).CCLS.) or ((385/37).CCLS.) or ((250/559.04).CCLS.) or ((250/559.11).CCLS.) or ((250/559.4).CCLS.) or ((250/227.14).CCLS.) or ((250/227.29).CCLS.) or ((250/566).CCLS.) or ((250/568).CCLS.) or ((235/473).CCLS.) or ((435/4).CCLS.) or ((435/288.7).CCLS.)) and (((bragg) near3 (grating or reflect\$)) same (substrate or (optic\$ near3 (fiber or waveguide)))) and (id or identif\$ or code or information or authent\$) and ((bind\$3 or attach\$4 or connect\$3 or bound\$3) with (chemical or element or species or assay or ion or molecule or atom\$2))             | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/08/26<br>16:31 |
| S135 | 86  | (((359/2).CCLS.) or ((359/566).CCLS.) or ((359/569).CCLS.) or ((359/558).CCLS.) or ((359/571).CCLS.) or ((359/572).CCLS.) or ((356/72).CCLS.) or ((356/73.1).CCLS.) or ((385/12).CCLS.) or ((385/128).CCLS.) or ((385/37).CCLS.) or ((250/559.04).CCLS.) or ((250/559.11).CCLS.) or ((250/559.4).CCLS.) or ((250/227.14).CCLS.) or ((250/227.29).CCLS.) or ((250/566).CCLS.) or ((250/568).CCLS.) or ((235/473).CCLS.) or ((435/4).CCLS.) or ((435/288.7).CCLS.)) and (((bragg) near3 (reflect\$)) same (substrate or (optic\$ near3 (fiber or waveguide)))) and (id or identif\$ or code or information or authent\$) and ((bind\$3 or attach\$4 or connect\$3 or bound\$3) with (chemical or element or species or assay or ion or molecule or atom\$2))                        | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/08/26<br>16:32 |
| S136 | 186 | ((435/6).CCLS.) and ((diffract\$ or bragg or hologra\$) near3 grating) and (substrate or (optic\$4 near3 fiber)) and (chemical or species or assay)   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/08/26<br>17:56 |
| S137 | 104 | (((435/6).CCLS.) and ((diffract\$ or bragg or hologra\$) near3 grating) and (substrate or (optic\$4 near3 fiber)) and (chemical or species or assay)) and (refract\$ near3 ind\$4)  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/08/26<br>16:32 |

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|------|------|---|---|----|-----|---------------------|
| S138 | 12   | ((435/6).CCLS.) and (((bragg) near3 (grating or reflect\$)) same (substrate or (optic\$ near3 (fiber or waveguide)))) and (id or identif\$ or code or information or authent\$) and ((bind\$3 or attach\$4 or connect\$3 or bound\$3) with (chemical or element or species or assay or ion or molecule or atom\$2))             | US-PGPUB;<br>USPAT;<br>EPO: JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON  | 2005/08/26<br>16:32 |
| S139 | 9    | ((435/6).CCLS.) and (((bragg) near3 (reflect\$)) same (substrate or (optic\$ near3 (fiber or waveguide)))) and (id or identif\$ or code or information or authent\$) and ((bind\$3 or attach\$4 or connect\$3 or bound\$3) with (chemical or element or species or assay or ion or molecule or atom\$2))                        | US-PGPUB;<br>USPAT;<br>EPO: JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON  | 2005/08/26<br>16:32 |
| S140 | 96   | ((435/6).CCLS.) and (((diffract\$ or bragg or hologra\$) near3 grating) same (substrate or (optic\$ near3 (fiber or waveguide)))) and (id or identif\$ or code or information or authent\$) and ((bind\$3 or attach\$4 or connect\$3 or bound\$3) with (chemical or element or species or assay or ion or molecule or atom\$2)) | US-PGPUB;<br>USPAT;<br>EPO: JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON  | 2005/08/26<br>16:32 |
| S141 | 6607 | ((436/518).CCLS.) or ((436/524).CCLS.) or ((436/525).CCLS.) or ((436/526).CCLS.) or ((436/527).CCLS.) or ((436/528).CCLS.) or ((436/531).CCLS.)   | US-PGPUB;<br>USPAT;<br>EPO: JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON  | 2005/08/26<br>16:33 |
| S142 | 153  | ((((436/518).CCLS.) or ((436/524).CCLS.) or ((436/525).CCLS.) or ((436/526).CCLS.) or ((436/527).CCLS.) or ((436/528).CCLS.) or ((436/531).CCLS.)) and grating) and (refract\$ near3 ind\$4)  | US-PGPUB;<br>USPAT;<br>EPO: JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON  | 2005/08/26<br>16:34 |
| S143 | 255  | ((((436/518).CCLS.) or ((436/524).CCLS.) or ((436/525).CCLS.) or ((436/526).CCLS.) or ((436/527).CCLS.) or ((436/528).CCLS.) or ((436/531).CCLS.)) and grating  | US-PGPUB;<br>USPAT;<br>EPO: JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON  | 2005/08/26<br>16:34 |
| S144 | 0    | wo-03061983-\$,did.   | US-PGPUB;<br>USPAT;<br>EPO: JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON  | 2005/08/26<br>17:07 |
| S145 | 0    | wo-0361983-\$,did.  | US-PGPUB;<br>USPAT;<br>EPO: JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON  | 2005/08/26<br>17:07 |
| S146 | 2    | ("6455004").PN.   | US-PGPUB;<br>USPAT;<br>EPO: JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | OFF | 2005/08/26<br>17:56 |
| S147 | 697  | ((diffract\$ or bragg or hologra\$) near3 (grating or element)) same (tag\$4 or label\$)  | US-PGPUB;<br>USPAT;<br>EPO: JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON  | 2005/08/29<br>15:43 |
| S148 | 299  | S147 and (refract\$ near4 ind\$4)   | US-PGPUB;<br>USPAT;<br>EPO: JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON  | 2005/08/29<br>16:21 |

|      |      |  |   |    |    |                     |
|------|------|--|---|----|----|---------------------|
| S149 | 640  | ((diffract\$ or bragg or hologra\$) near3 (grating or element)) same (embed\$ or encapsulat\$ or bur\$3 or cover\$4)) and (tag\$4 or label\$)                    | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/08/29<br>16:21 |
| S150 | 366  | S149 and (refract\$ near4 ind\$4)  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/08/29<br>15:45 |
| S151 | 286  | S150 and inciden\$   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/08/29<br>15:47 |
| S152 | 729  | ((diffract\$ or bragg or hologra\$) near3 (grating or element)) with (key or cod\$4)   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/08/29<br>16:21 |
| S153 | 1432 | ((diffract\$ or bragg or hologra\$) near3 (grating or element)) with (key or cod\$4 or encod\$4)   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/08/29<br>17:52 |
| S154 | 382  | S153 and (refract\$ near4 ind\$4) and inciden\$  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/08/29<br>16:22 |
| S155 | 239  | S154 and (embed\$ or encapsulat\$ or bur\$3 or cover\$4)   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/08/29<br>16:39 |
| S156 | 52   | ((diffract\$ or bragg or hologra\$ or volume) near3 (grating or element)) with (embed\$ or encapsulat\$ or bur\$3 or cover\$4)) same (key or cod\$4 or encod\$4) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/08/29<br>17:59 |
| S157 | 23   | S156 and (refract\$ near4 ind\$4)  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/08/29<br>17:54 |
| S158 | 314  | ((diffract\$ or bragg or hologra\$ or volume) and (grating or element) and (embed\$ or encapsulat\$ or bur\$3 or cover\$4) and (key or cod\$4 or encod\$4)).clm. | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/08/29<br>18:05 |
| S159 | 60   | S158 and (refract\$ and ind\$4).clm.   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/08/29<br>18:00 |

|      |     |   |   |    |    |                     |
|------|-----|---|---|----|----|---------------------|
| S160 | 104 | ((diffract\$ or bragg or hologra\$ or volume) and (grating or element) and (refract\$ and ind\$4) and (key or cod\$4 or encod\$4) and (substrate or base)),clm. | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT<br>;<br>IBM_TDB | OR | ON | 2005/08/29<br>18:41 |
|------|-----|---|---|----|----|---------------------|